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(FILE 'HOME' ENTERED AT 11:56:05 ON 04 DEC 2003)

=> S (FIBER OR FIBRE) (L)REINFORCED(L) (MOULDED OR MOLDED) (L)ARTICLE
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FILE COVERS 1907 - 4 Dec 2003 VOL 139 ISS 23
FILE LAST UPDATED: 3 Dec 2003 (20031203/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S (FIBER OR FIBRE) (L) REINFORCED (L) (MOULDED OR MOLDED) (L) ARTICLE
455873 FIBER
485220 FIBERS
629415 FIBER
 (FIBER OR FIBERS)
2876 FIBRE
1890 FIBRES
4582 FIBRE
 (FIBRE OR FIBRES)
123393 REINFORCED
 331 MOULDED
119479 MOLDED
 84674 ARTICLE
 70187 ARTICLES
142612 ARTICLE
 (ARTICLE OR ARTICLES)
L1 301 (FIBER OR FIBRE) (L) REINFORCED (L) (MOULDED OR MOLDED) (L) ARTICLE

=> S POLYAMIDES OR POLYESTERS OR POLYCARBONATES OR POLYURETHANES OR POLYUREA
POLYOLEFINS OR POLYSTYRENES OR POLYACRYLNITRILES OR POLYVINYL CHLORIDE OR
POLYVINYLDENE CHLORIDE OR POLYVINYL ALCOHOL OR POLYTETRAFLUOROETHYLENE
89780 POLYAMIDES
183179 POLYESTERS
46142 POLYCARBONATES
69020 POLYURETHANES
8292 POLYUREA

7201 POLYUREAS
 9945 POLYUREA
 (POLYUREA OR POLYUREAS)
 46726 POLYOLEFINS
 3997 POLYSTYRENES
 0 POLYACRYLNITRILES
 74282 POLYVINYL
 162 POLYVINYLS
 74398 POLYVINYL
 (POLYVINYL OR POLYVINYLS)
 969597 CHLORIDE
 149295 CHLORIDES
 1037620 CHLORIDE
 (CHLORIDE OR CHLORIDES)
 13636 POLYVINYL CHLORIDE
 (POLYVINYL (W) CHLORIDE)
 9625 POLYVINYLIDENE
 9 POLYVINYLIDENES
 9631 POLYVINYLIDENE
 (POLYVINYLIDENE OR POLYVINYLIDENES)
 969597 CHLORIDE
 149295 CHLORIDES
 1037620 CHLORIDE
 (CHLORIDE OR CHLORIDES)
 2358 POLYVINYLIDENE CHLORIDE
 (POLYVINYLIDENE (W) CHLORIDE)
 74282 POLYVINYL
 162 POLYVINYLS
 74398 POLYVINYL
 (POLYVINYL OR POLYVINYLS)
 208349 ALCOHOL
 142977 ALCOHOLS
 325249 ALCOHOL
 (ALCOHOL OR ALCOHOLS)
 528710 ALC
 176050 ALCS
 618762 ALC
 (ALC OR ALCS)
 733358 ALCOHOL
 (ALCOHOL OR ALC)
 34636 POLYVINYL ALCOHOL
 (POLYVINYL (W) ALCOHOL)
 12649 POLYTETRAFLUOROETHYLENE
 54 POLYTETRAFLUOROETHYLENES
 12690 POLYTETRAFLUOROETHYLENE
 (POLYTETRAFLUOROETHYLENE OR POLYTETRAFLUOROETHYLENES)
 L2 432081 POLYAMIDES OR POLYESTERS OR POLYCARBONATES OR POLYURETHANES OR
 POLYUREA OR POLYOLEFINS OR POLYSTYRENES OR POLYACRYLNITRILES OR
 POLYVINYL CHLORIDE OR POLYVINYLIDENE CHLORIDE OR POLYVINYL ALCOHOL
 OR POLYTETRAFLUOROETHYLENE

 => S (FIBERS OR FIBRES) (L) (GLASS OR SLAG OR STONE OR CERAMICS OR QUARTZ OR SILICA
 GLASS OR BORON OR SILICON CARBIDE OR BORON NITRIDE OR BORON CARBIDE OR ALUMINUM
 OXIDE OR ZIRCONIUM OXIDE OR STEEL OR ALUMINUM OR TUNGSTEN OR CARBON OR
 MONOCRYSTALLINE CORUNDUM OR SILICON CARBIDE)
 485220 FIBERS
 1890 FIBRES
 624087 GLASS
 118268 GLASSES
 649844 GLASS
 (GLASS OR GLASSES)
 82286 SLAG
 51306 SLAGS
 90545 SLAG
 (SLAG OR SLAGS)

=> S L1 AND L2 AND L3 AND L4
L5 6 L1 AND L2 AND L3 AND L4

=> D L5 1-6 BIB,ABS

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:282799 CAPLUS
DN 138:288997
TI Moldable high performance nonwoven, woven, and knit forms
IN Stanitis, Gary; Cistone, Frank; Choi, Jin
PA Xtreme Fibers, Inc., USA; Lantor, Inc.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2003029541	A1	20030410	WO 2002-US31255	20020930	
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2001-326745P P 20011002

AB The invention is related to a web or fabric made with high performance **fibers** or filaments having properties such as high melting, chem. resistance, non- burning, strong, non-wetting, high purity. The web also contains **fibers** or filaments with individual deniers between 0.5 and 300 made from melt processable perfluoropolymers. The fabric is thermally treated so as to allow the melt processable perfluoropolymer **fibers** (e.g., PTFE **fibers**) and yarns to partially, or fully, melt and adhere to the other **fibers** in the web or fabric matrix. The fabric or web is capable of being **molded**, drawn, or formed using pressure or vacuum prior to the thermal treatment process, then fixed into place during the thermal treatment process, making a high performance fabric or web **article**.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:42495 CAPLUS
DN 138:90740
TI Carbon fiber-reinforced base materials for composites with high compression strength after impact comprising fabrics of carbon fiber bundles having specified modulus and breaking energy and having specified polymer content and preforms and composites therefrom
IN Wadahara, Eisuke; Nishimura, Akira; Horibe, Ikuo
PA Toray Industries, Inc., Japan
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003004758	A1	20030116	WO 2002-JP6696	20020702
	W:	US			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,			

LU, MC, NL, PT, SE, SK, TR
JP 2003082117 A2 20030319 JP 2002-126065 20020426
PRAI JP 2001-203263 A 20010704
JP 2002-126065 A 20020426
AB The **carbon fiber**-reinforced base materials (A1) comprise **fabrics** (A) of **carbon fiber** bundles comprising multiple **carbon fiber** filaments and exhibiting tensile modulus .gtoreq.210 GPa and breaking energy .gtoreq.40 MJ/m³, and polymers (B) adhered to the **fabrics** with B polymer content 1-20 parts per 100 parts A fabric, or the **carbon fiber**-reinforced base materials comprise A1 base materials exhibiting air permeation rate 10-200 cm³/cm²-s, or the **carbon fiber**-reinforced base materials having B polymers adhered to the surface of A **fabrics** in the dotted form with diam. of the dots .ltoreq.1 mm, or the **carbon fiber**-reinforced base materials comprise A1 base materials having the m.p. or flow initiation temp. of B polymers 50-150.degree., or the **carbon fiber**-reinforced base materials comprise A1 base materials having polymers (C) showing no solv. or flowability at the m.p. or the flow initiation temp. of B polymers adhered to A **fabrics** with C polymer content 1-10 parts per 100 parts A fabric. The preforms (D) comprise laminates of .gtoreq.2 of A1 base material and have the base materials bonded together by B or C polymers. The composites essentially comprise D preforms impregnated with polymers other than B polymers. The composites are useful for primary structures, secondary structures, external materials, interior materials, and parts for aircrafts, automobiles, and ships. A woven fabric comprising polyacrylonitrile-type **carbon fiber** bundles with no. of filaments 24,000, tensile strength 5830 MPa, modulus 294 GPa, and breaking energy 58 MJ/m³ as warp yarns and glass **fiber** bundles as auxiliary filling yarns was prep'd., coated with a particulate polymer compn. contg. 60% polyether sulfone (Sumikaexcel 50003P) and 40% epoxy resin (AK-601) to form a **fabric** with polymer compn. content 10 parts per 100 parts **fabric**, heated at 180-200.degree. by IR rays, pressed, cooled, and wound to give a **carbon fiber**-reinforced base material 0.36 mm thick and showing air permeation rate 23.7 cm³/cm²-s and cover factor 99%. A laminate of the base material was vacuum **molded** in the cavity of a mold for 1 h at mold temp. 80.degree. to give a preform. The preform was impregnated with a compn. contg. Araldite MY-721, Epikote 825, AK-601, Epiclon HP-7200L, Epicure W, 3,3'-diaminodiphenyl sulfone, and Sunicure S and cured 2 h at 180.degree. in a mold to give a composite showing no pin holes and no voids and exhibiting compression strength at normal temp. after impact 248 MPa and compression strength at high temp. after heat-treatment in the wet state 972 MPa.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:10652 CAPLUS
DN 132:65112
TI Hydroxy-phenoxy ether polymer fiber-reinforced composites with thermoplastic processability and composite manufacture
IN Brennan, David J.; White, Jerry E.; Calhoun, Daryl R.
PA The Dow Chemical Company, USA
SO U.S., 9 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 6011111 A 20000104 US 1993-138300 19931018

PRAI US 1993-138300 19931018

AB A thermoplastic composite is prep'd. by applying a hydroxy-phenoxyether polymer onto the surface of reinforcing **fibers** or by the in-situ polymn. of mixts. of diepoxides and difunctional species in the presence of reinforcing **fibers**. The composites can be **molded** into shaped **articles** useful for structural materials and **parts** by conventional thermoforming or other fabrication techniques. A composite was prep'd. by molding a mixt. of DER 332 and monoethanolamine in the presence of a glass **fiber/carbon fiber woven fabric** to give a thermoformable composite having tensile modulus 2.2 times. 106 psi.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:409494 CAPLUS

DN 131:74583

TI Manufacture of molded fabric-reinforced sheet-like friction materials with high tensile strength and abrasion resistance

IN Sato, Yuji; Takase, Kazuhiko

PA Toshiba Tungaloy Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 11173354 A2 19990629 JP 1997-361741 19971210

PRAI JP 1997-361741 19971210

AB The friction materials are prep'd. by laying pastes (A) contg. friction materials on reinforcing **woven** and/or nonwoven **fabrics** in a mold, molding the compns. by a screen-printing transfer method, and heat-treating the moldings to give friction materials essentially contg. a layer comprising the **fabrics** impregnated with A pastes. The friction materials are useful for brakes, clutches, and sliding **parts** (no data). A paste contg. 60:5:35 (vol. ratio) mixt. of pulp **fibers**, SiO₂, and phenolic resin was **molded** in a **carbon fiber woven fabric**-covered mold cavity by a screen-printing method and pressed 5 h at 230.degree. and 10 kg/cm² to give a ring-shaped disk friction material with av. breaking strength 310 kg/cm².

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:219850 CAPLUS

DN 128:231134

TI Hydroxyphenoxyether polymer thermoplastic composites

IN Brennan, David J.; White, Jerry E.; Calhoun, Daryl R.

PA Dow Chemical Co., USA

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9814498 A1 19980409 WO 1996-US15697 19960930

W: FI, JP, KR

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 929590 A1 19990721 EP 1996-936089 19960930

EP 929590 B1 20020529

R: DE, FR, GB

JP 2001501248 T2 20010130 JP 1998-516460 19960930

FI 9900448 A 19990302 FI 1999-448 19990302

PRAI WO 1996-US15697 W 19960930

AB A thermoplastic composite is prep'd. by applying a hydroxy-phenoxyether polymer onto the surface of reinforcing **fibers** or by the in situ polymn. of mixts. of diepoxides and difunctional species in the presence of reinforcing **fibers**. The composites can be **molded** into shaped **articles** useful for structural materials and **parts** by conventional thermoforming or other fabrication techniques. A composite was prep'd. by molding a mixt. of DER 332 and monoethanolamine in the presence of a glass **fiber/carbon fiber woven fabric** to give a thermoformable composite.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1986:444359 CAPLUS

DN 105:44359

TI Laminates

IN Cole, Bill W.; Brooks, Gary T.

PA Amoco Corp., USA

SO U.S., 17 pp.

CODEN: USXXAM

DT Patent

LA English

FAN,CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4579773	A	19860401	US 1984-642405	19840820
	JP 61069841	A2	19860410	JP 1985-181581	19850819
	EP 178762	A2	19860423	EP 1985-305924	19850820
	EP 178762	A3	19870624		
	EP 178762	B1	19930113		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE AT 84557	E	19930115	AT 1985-305924	19850820

PRAI US 1984-642405 19840820

EP 1985-305924 19850820

AB Heat-resistant continuous **fibers** impregnated with solns. of **polyamide-polyimides** are useful in the manuf. of laminates for the replacement of metals. Thus, stirring 4,4'-oxydianiline 99.6, m-phenylenediamine, N-methylpyrrolidone (I) 604, trimellitic anhydride chloride 142.5, and trimellitic anhydride 6.8 parts for 2.5 h at 77-95.degree. F gave **polyamide-polyimide** (II). **Woven SiC fabric** was impregnated with a 30% I soln. of II, and dried 4 days at room temp., 2 h at 250.degree. F, 1 h at 300.degree. F, and 1 h at 400.degree. F to solvent content 1.5%. Four prepgs were **molded** at 660.degree. F, 600.degree. F/500 psig, and 300.degree. F/500 psig to give a laminate with good phys. properties.

=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
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FULL ESTIMATED COST

37.66 37.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
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CA SUBSCRIBER PRICE

-3.91 -3.91

STN INTERNATIONAL LOGOFF AT 15:15:59 ON 09 SEP 2003

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
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FULL ESTIMATED COST

0.21 0.21